

AMENDMENTS

Amendments to the Claims

Please amend the claims according to the following listing of the claims.

Listing of the claims

1. (currently amended) A foam composed of a high-temperature-resistant thermoplastic selected from the group consisting of polyether sulfones, polysulfones, polyethersulfonamides, and mixtures of these, and having an open-cell structure, wherein the open-cell factor for the foam is at least 75%, and wherein the foam has a cell size of from 50 to 2000 μm , wherein cells are distributed across the entire bulk of the foam, and wherein the envelope density of the foam is lower than the envelope density of the high-temperature-resistant thermoplastic alone.

2 – 4. (canceled)

5. (previously amended) A foam as claimed in claim 1, wherein the plastic has a glass transition temperature above 170°C.

6 – 13. (canceled)

14. (previously presented) A molding, in particular a sheet, comprising an open-cell foam as claimed in claim 1.

15–23. (canceled)

24. (previously presented) A foam as claimed in claim 1, wherein the open-cell factor for the foam is at least 85%.

25. (previously presented) A foam as claimed in claim 1, wherein the open-cell factor for the foam is at least 90%.

26. (previously presented) A foam as claimed in claim 1, which has a cell size of from 100 to 1000 μm .
27. (previously presented) A foam as claimed in claim 1, which has a cell size of from 100 to 800 μm .
28. (previously presented) A foam as claimed in claim 1, which has a density of from 20 to 200 g/l.
29. (previously presented) A foam as claimed in claim 1, which has a density of from 20 to 150 g/l.
30. (previously presented) A foam as claimed in claim 1, which has a density of from 30 to 100 g/l.
31. (previously presented) A foam as claimed in claim 1, which has a density of from 20 to 200 g/l.
32. (previously presented) A foam as claimed in claim 26, which has a density of from 20 to 150 g/l.
33. (previously presented) A foam as claimed in claim 27, which has a density of from 30 to 100 g/l.
34. (previously presented) A foam as claimed in claim 1, wherein the plastic has a glass transition temperature above 180°.
35. (previously presented) A foam as claimed in claim 1, wherein the plastic has a glass transition temperature above 200°.

36. (previously presented) A foam as claimed in claim 1, wherein the plastic is thermoplastically extrudable at temperatures above 280°.
37. (previously presented) A foam as claimed in claim 1, wherein the plastic is thermoplastically extrudable at temperatures above 300°.
38. (previously presented) A foam as claimed in claim 1, wherein the plastic is thermoplastically extrudable at temperatures above 320°.
39. (previously presented) A foam as claimed in claim 5, wherein the plastic is thermoplastically extrudable at temperatures above 280°.
40. (previously presented) A foam as claimed in claim 34, wherein the plastic is thermoplastically extrudable at temperatures above 300°.
41. (canceled)
42. (new) A foam obtained by extruding

a melt comprising a high-temperature-resistant thermoplastic selected from the group consisting of polyether sulfones, polysulfones, polyethersulfonamides, and combinations thereof,

at least one blowing agent, and

a foaming plastic comprising a cell-opener selected from the group consisting of a pulverulent solid, a foreign polymer, and combinations thereof,

into the open atmosphere at a temperature higher by from 2 to 12°C than the temperature at which a closed-cell foam is formed.